

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A radio device testing system comprising:  
a radio device having a software radio stack including a plurality of logical layers through which radio messages comprising data are processed in accordance with a radio protocol;

test control means for controlling and monitoring testing of said radio device via a link therebetween; and

stack perturbation means, linked to said software radio stack and to said test control means, for, under control of said test control means, altering data of a radio message en route through one of said plurality of logical layers of said software radio stack, by:

receiving the radio message at a first layer of said plurality of logical layers of said software radio stack, the radio message comprising one or more fields;

creating a modified radio message by modifying data of one of the fields of the received radio message; and

transferring the modified radio message to a second layer of said plurality of logical layers of said software radio stack.

2. (Previously Presented) A testing system according to claim 1, wherein said stack perturbation means is linked to at least one of said layers in said software radio stack.

3.-4. (Canceled)

5. (Previously Presented) A testing system according to claim 1, further comprising storage means for receiving and storing test data from said test control means and said stack perturbation means in a central data file.

6. (Previously Presented) A testing system according to claim 1, further comprising radio message monitoring means for intercepting over air radio messages and supplying said message data to said test control means via a link therebetween.

7. (Previously Presented) A testing system according to claim 1, wherein said test and control means comprises a distributed system of client computers under control of a server computer, each client being linked to at least one radio device and respective stack perturbation means, the radio devices linked to said clients thereby forming a radio network, and wherein said server computer synchronises and controls perturbation, testing and monitoring of said radio network.

8. (Previously Presented) A testing system according to claim 6, further comprising an interruptible power supply for supplying power to the radio devices under test.

9. (Previously Presented) A testing system according to claim 8, wherein said power supply is interruptible under control of said radio monitoring means and said server computer.

10. (Previously Presented) A testing system according to claim 5, further comprising analysis means for automatically analyzing said data stored in said central data file.

11. (Currently Amended) A method, comprising:  
testing a radio device having a software radio stack comprising a plurality of logical layers through which radio messages comprising data are processed in accordance with a radio protocol;

altering data of a radio message en route through one of said plurality of logical layers of said software radio stack; by:

receiving the radio message at a first layer of said plurality of logical layers of said software radio stack, the radio message comprising one or more fields;

creating a modified radio message by modifying data of one of the fields of the received radio message; and

transferring the modified radio message to a second layer of said plurality of logical layers of said software radio stack; and

providing response data from said software radio stack to a test controller.

12. (Previously Presented) A method according to claim 11, further comprising analyzing said response data.

13. (Currently Amended) A method according to claim 12, wherein over air radio messages are monitored by a radio message monitor-, and further provided to said test controller for analysis together with said response data.

14. (Previously Presented) A method according to claim 13, wherein the power supplied to said radio device by an interruptible power supply is interrupted under control of said radio message monitor.

15. (Canceled)

16. (Currently Amended) A program code memory storing program code which, when executed on a testing computer, causes said testing computer to perform a method comprising:

testing a radio device having a software radio stack comprising a plurality of logical layers through which radio messages comprising data are processed in accordance with a radio protocol;

altering data of a radio message en route through one of said plurality of logical layers of said software radio stack; by:

receiving the radio message at a first layer of said plurality of logical layers of said software radio stack, the radio message comprising one or more fields;

creating a modified radio message by modifying data of one of the fields of the received radio message; and

transferring the modified radio message to a second layer of said plurality of logical layers of said software radio stack; and

receiving response data from said software radio stack.

17. (Previously Presented) A program code memory according to claim 16, wherein the method further comprises:

analyzing said response data.

18. (Previously Presented) A program code memory according to claim 17, wherein the method further comprises:

intercepting over air radio messages; and

analyzing the intercepted radio messages together with said response data.

19. (Previously Presented) A testing system according to claim 1 wherein said stack perturbation means is linked to said test control means by a link that is distinct from said software radio stack.

20. (Previously Presented) A method according to claim 11 wherein altering data of a radio message includes altering, under control of a stack perturbation module linked to said software radio stack and to said test controller, the data of the radio message en route through the one logical layer of said software radio stack.

21. (New) A method according to claim 11, wherein altering data of a radio message includes modifying a length field of the received radio message.

22. (New) A method according to claim 11, wherein altering data of a radio message includes modifying a network address field of the received radio message.

23. (New) A method according to claim 11, wherein altering data of a radio message includes altering a bit that signifies whether encryption is enabled or not.

24. (New) A method according to claim 11, wherein altering data of a radio message includes inputting data into a state of one of said plurality of logical layers of said software radio stack.

25. (New) A testing system according to claim 1, wherein the first layer of said plurality of logical layers is an application layer.

26. (New) A testing system according to claim 1, wherein the first layer of said plurality of logical layers is a physical layer and the second layer of said plurality of logical layers is a medium access control layer.